



Web3 - *Integration von SAPTM Systemen in Cocoon*

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Vision

Prerequisites

Configuration

Usage

Who



John Doe

**projects in SAP, Cocoon, Java
and XML Umfeld**

Open Source

Software Architecture



information

interaction

transaction

transformation



**interconnectedness (LAN, WAN,
WAP, GPRS, UMTS, ???)**

**Universal knowledgebase –
knowledge management systems**

browser is universal frontend



**large scale business process
integration**

**e-Business no longer exists –
everything is e-Business**



**The future belongs to system
integrators capable of
integrating**



set of Avalon components

2 transformers

set best practices

prototyping environment



SAP Java Connector

librfc32.dll, sapjcorfc.dll; sapjco-2.0.X.jar

**Cocoon 2.1 standard distro (src/binary)
blocks.properties**



- High performance JNI-based RFC middleware.
- Supports R/3 3.1I and higher (and other SAP Components that have BAPIs or RFMs).
- Supports inbound (Java client calls BAPI or RFM) and outbound (ABAP calls Java server) calls.



- Supports synchronous, transactional (important for IDocs), and queued RFC.
- Supports client pooling (good for web servers).
- Multi-platform (Win32, Linux, etc.)
- Complete and correct code-page handling (incl. multi-byte languages).
- Easy to install and deploy.



- Separation of Concerns (SoC)
- Inversion of Control (IoC)
- XML Middle-Tier
- Blocks
- Client aware rendering



or – „The Best of Breed“

- Pattern from JDBC Datasource
- Pool from SAP
- Selector from Avalon
- Transformer and Streamer from Cocoon



cocoon.xconf à

```
<web3 logger="web3">
  <backend name="indy">
    <pool level="0" size="10" trace="false">
      <client>@client@</client>
      <user>{configuration:user}</user>
      <passwd>{configuration:passwd}</passwd>
      <lang>DE</lang>
      <ashost>@ashost@</ashost>
      <sysnr>00</sysnr>
      <gwhost>sapgw00</gwhost>
    </pool>
  </backend>
</web3>
```



sitemap.xmap à

```
<map:transformer name="rfc"  
  src="org.apache.cocoon.transformation.Web3RfcTransformer" logger="web3.transformation">  
  <system>indy</system>  
</map:transformer>
```

```
<map:transform type="rfc">  
  <map:parameter name="system" value="indy"/>  
</map:transform>
```



In your own files à

```
<page
  xmlns:rfc="http://apache.org/cocoon/Web3-
  Rfc/1.0">
  ...
</page>
```

2.0 is in pipeline J

Web3 Usage



```
<page xmlns:rfc="http://apache.org/cocoon/Web3-Rfc/1.0">
  <rfc:include name="BAPI_SALESORDER_CREATE" streamer="token"
    credentials="true">
    <rfc:import>
      <rfc:field name="CUSTNO">14232</rfc:field>
      ....
    </rfc:import>
    <rfc:tables>
      <rfc:table name="ADRESS">
        <rfc:row id="1">
          <rfc:field name="FIRSTNAME">Henriette</rfc:field>
          ....
        </rfc:row>
        ....
      </rfc:table>
    </rfc:tables>
  </rfc:include>
</page>
```

Web3 Usage



```
<page xmlns:rfc="http://apache.org/cocoon/Web3-Rfc/1.0">
  <rfc:include name=„BAPI_SALESORDER_CREATE">
    <rfc:export>
      <rfc:field name=„ORDERNO">9998234</rfc:field>
      .....
    </rfc:export>
    <rfc:tables>
      <rfc:table name=„ADRESS">
        <rfc:row id="1">
          <rfc:field name=„FIRSTNAME">Henriette</rfc:field>
          ....
        </rfc:row>
        .....
      </rfc:table>
    </rfc:tables>
  </rfc:include>
</page>
```



Examples from WienGAS

- 1) `auftrag.getList`
- 2) `auftrag.getDetail`
- 3) `auftrag.update`

Web3 Resources



<http://service.sap.com/connectors>

http://searchsap.techtarget.com/featuredTopic/0,290042,sid21_gci919202,00.html

<http://www.sapgenie.com/interfaces/javaconnector.htm>

<http://cocoon.apache.org/2.1/>

<http://cocoon.apache.org/2.1/developing/web3.html>